## KELLER

## Acculevel SDI

High accuracy SDI-12 level transmitter

#### FEATURES:

- $\cdot$  Standard ±0.05% FS TEB and USGS OSW accuracies available
  - $\cdot$  Optional OSW spec on ranges up to 70 ft W.C. from 0...40°C.
- · NSF/ANSI 61 and 372 certified construction for use in drinking water applications,
- · 16-bit internal digital error correction for cost-effective low Total Error Band (TEB)<sub>3</sub>
- $\cdot$  Selectable digital outputs (SDI-12 or RS485) for maximum versatility.
- · RS485 modified-MODBUS and SDI-12 V1.3 protocol compatibility.
- $\cdot$  316L stainless construction standard Optional titanium for severe applications.
- · 2-year warranty covers defects in materials and workmanship.
- · Lightning protection included at no additional cost.
- $\cdot$  Available with optional, removable cable.





#### Edition 04/2025 Subject to alterations sales.us@keller-pressure.com

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#### Acculevel SDI High accuracy SDI-12 level transmitter

Pressure Ranges,		
Relative	Infinite between 03 and 0900 ft W.C.	
Absolute	Available on request	
1. Level range may be specified in units of bar,	, mbar, mH2O, psi, ftWC, or inWC	

 Outputs2
 SDI-12 + RS485

 Digital
 SDI-12 + RS485

 Pressure Resolution
 0.0005% FS

 Temp. Resolution
 < 0.01 °C</td>

 Comm. Protocol
 SDI-12 V1.3, MODBUS RTU

 Baud Rate
 1200 bits/s

2. The Acculevel SDI can communicate in either SDI-12 or RS485 at any one time. By default, the Acculevel SDI will ship in SDI-12 mode. A USB Dongle is required to change to RS485 mode.

Accuracy <sub>3</sub>					
	Standard		Optional <sub>4</sub>		
	≥10ftWC to ≤330ftWC	< 10ftWC and > 330ftWC			
Total Error Band	±0.05% FS	±0.1% FS	$\pm 0.01$ ft WC when reading $\leq 10$ ftWC or $\pm 0.1\%$ of reading $>10$ ftWC <sub>4</sub>		
Compensated Temperature	0 - 50° C		0 - 40° C		
Temperature Accuracy	typ. ± 0.3 °C				

3. Total Error Band (TEB) includes the combined effects of non-linearity, hysteresis, and non-repeatability as well as thermal dependencies, over the compensated temperature range.

4. Optional accuracy is written in compliance with USGS OSW specification mandates and limited to a maximum range of 70 ftWC and a compensated temperature range of 0...40° C

Electrical <sub>5</sub>		
Supply	632 VDC	
Power Consumption	<0.1mA (Sleep)	
	< 5.5 mA (active)	
Startup Time	< 5 ms (interface ready)	
Load Resistance (mA)	<(Supply-6V)/0.0055A	
Insulation GND-CASE	> 10 MΩ @ 300 V	

5. Nominal values may be higher depending upon cable length. Cable resistance (~70Ω / 1000ft) adds to the supply requirement. In order to insure proper system operation, calculate the minimum required supply voltage (at the source) as follows: MINIMUM SUPPLY VOLTAGE = 6 + 0.022 (CABLE LENGTH x 0.07) VDC

Certifications	
CE	EN50081-1, EN50082-2
NSF / ANSI <sub>6</sub>	61, 372
6. NSF/ANSI 61 and 372 approval app	lies to both 316L stainless steel & titanium construction with PE & EPDM cable sealing option, which is standard on this instrument unless otherwise specified.



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Environmental			
Protection Rating	IP68		
Storage Temp.	-2080° C		
Operating Temp	-1060° C		
Wetted Materials	316 L Stainless Steel		
	Titanium Optional		
	Polyamide		
Cable & Sealing <sub>7</sub>	PE & EPDM for water / wastewater		
	Hytrel & Viton for hydrocarbons		
	Tefzel & Viton or EPDM as required for chemical interaction		
NSF/ANSI 61 and 372 approval applies t	to both 316L stainless steel & titanium construction with PE & EPDM cable sealing option, which is standard on this instrument unless otherwise specified.		

**Optional Accessories** 







Drying Tube Assembly



Bellows Assembly



Cable Hanger



then Cap



Termination Enclosure



Pressure Test Adapter



Stabilizing Weight



Interface Converter (RS485)



Signal Line Surge Protector



Detachable Cable Whip



Process Meter



Open-faced Nose Cap



